

# Attitude towards ICT Integration and Level of Computer Competence among English Teachers of Iligan City: Basis for ICT Enhancement Program

Adelfa C. Silor, Rebecca S. Galela, Enrico C. Riconalla, Faith Stephanny C. Silor

Department of Professional Education, College of Education, MSU-IIT, Iligan City, Philippines

**Abstract**—This study aimed to analyze the attitude of English teachers towards ICT integration as well as their level of computer competence. The results of this study have been made as the basis of making ICT enhancement Program for the English Language teachers. This study is also very important to all school administrators, educational planners, teachers, parents, learners and the people in the community. Through this study, the performance of the English teachers in elementary, secondary and tertiary, in the integration of ICT in the English Language Teaching, will be improved. Thus, quality education can be achieved considering that the English teachers will become competent in the integration of ICT in the English Language Teaching pedagogy. As a result, the performance of elementary pupils, secondary students as well as the college students in learning English as a Second Language, will be also improved. Hence, the results of the study have been used as basis in making ICT Enhancement Program for English teachers.

**Keywords**—Attitude, Computer Competence, English Teachers

## Introduction

Learning the English Language is very important in the age of information technology. Users of ICT need communication skills in English in the application of computer technology. In fact, listening, speaking, reading and writing skills are the most important in learning the English Language. These skills should be learned thoroughly by the learners because these are very relevant in the application of computer technology. The terms in computers are in English terms which can be universally understood by all people in the world. Hence, it is really in hands of the English teachers to develop the English Language Competence of the students through the aid of ICT integration in the teaching pedagogy. So, English teachers should integrate ICT in teaching English as a Second Language. It is therefore a must for them to upgrade themselves on the computer applications for the global competitiveness. These things could be attained if the school administrators, and curriculum planners give importance to the integration of ICT in the school curriculum. Thus, upgrading the computer competence of the English teachers, as well as upgrading the ICT facilities and providing enough classroom computers are the great avenue of realizing quality education.

This study is very important to all school administrators, educational planners, teachers, parents, learners and the people in the community. Through this study, the performance of the English teachers in Iligan City Division, in the integration of ICT in the English Language Teaching, will be improved. Thus, quality education can be achieved considering that the English teachers will become competent in the integration of ICT in the English Language Teaching. As a result, the performance of elementary pupils as well as the secondary students in learning English as a Second Language, will be also improved. Thus, the learners of today who will become competent in communication using English Language, the medium of instruction, are the great avenue of solving the problems of the country, Philippines through communicative competence, linguistic ability, which will maintain its competitive edge in all aspects of economic

environment be it administration, education, trade or finance in the Philippines. Thus, integration of ICT tools in the teaching and learning of English, has found to bring other benefits too. Besides motivating students and raising self-esteem and confidence, ICT can enhance students' interaction, verbalization and involvement in collaborative learning.

### Literature Review

The educational theory of progressivism often associated with John Dewey's pragmatism or experimentalism, stressed the view that all learning should center on the child's interests and needs. This theory is very relevant to this study because this principle is motivating the students to expose themselves to learning activities wherein they interact with their environment. Hence, students' projects will be based on their common shared experiences thereby rejecting barriers of class, race, or creed. The teacher serves as facilitator while the students will work on their projects through cooperative learning particularly on doing their research through the use of ICT.

The theory of reconstructionism is very useful in this study because the educational philosophies are culturally based and grow out of a specific cultural pattern conditioned by living at a given time in a particular place. They believe that culture is dynamic, that man can re-shape his culture so that it promotes optimum possibilities for development. This theory helps a lot with the teachers in teaching English as a second language because through this theory they will be guided on improving their teaching strategies through the integration of ICT in teaching English as second language. According to San Mateo (1997), society has to reconstruct its values, and education has a major role to play in bridging the gap between the values of culture and technology. It is the school's task to encourage the critical examination of the cultural heritage and find the elements that are to be discarded and those that have to be modified. Hence, English teachers must improve their teaching-learning process by means of integrating ICT in the English Language Teaching.

The theory of existentialism is very much significant to this study because this theory is a way of viewing and thinking about life in the world so that priority is given to individualism and subjectivity. Education is the process of developing awareness about the freedom of choice and meaning and responsibility for one's choice. Education should be concerned with effective experiences, with these elements of experience which are subjective and personal. Thus, in connection to this present study, ICT integration in English Language Teaching is very much fitted as a teaching strategy in the teaching-learning process because students will be experiencing in using ICT in their daily lives.

Furthermore, this study is also supported from the idea of Hennessy Sara (2005) stated that "evident commitment to incorporating ICT was tempered by a cautious, critical approach, and by the influence of external constraints. Teacher accounts emphasized both the use of ICT to enhance and extend existing classroom practice and change in terms of emerging forms of activity which complemented or modified practice. A gradual process of pedagogical evolution was apparent; teachers were developing and trialling new strategies specifically for mediating ICT-supported learning. In particular, these overcame the potentially destructive role of some forms of ICT by focusing pupils' attention onto underlying learning objectives."

Moreover, according to Mark Warschauer (2001), "language has always played an important role in the formation and expression of identity and plays an important role in cyberspace with the use of the Internet as a tool for promoting language revitalization. If language is becoming an increasingly important identity marker in the age of information, what then is the role of language in cyberspace? On the one hand, the Internet highlights the role of language while simultaneously masking the role of other identity markers such as race, gender, or class. As the saying goes, nobody on the Internet knows that you're not a dog, nor can they easily determine if you're Black or White, male or female, gay or straight, or rich or poor. But they can immediately notice what language and dialect you are using - and that language is usually English."

In addition, “both language and technology are tools for individual and societal development. The developmental approach to integrating technology in language education, based on consideration of both product and process; a teacher education program on computers in English language teaching and a basic English methodology course taught via videoconferencing. It indicates that a developmental approach is critical to successful integration and use of technology in language education programs”.

Further, in a study conducted by Demetriadis et al.(2003) published in Computers and Education Volume 41 Issue, indicates “ that although teachers express considerable interest in learning how to use technology they need consistent support and extensive training in order to consider themselves able for integrating it into their instructional practice. Teachers are interested in using ICT (1) to attain a better professional profile, and (2) to take advantage of any possible learning benefits offered by ICT but always in the context of the school culture. They are willing to explore open and communicative modes of ICT-based teaching whenever school objectives permit, otherwise they appear to cautiously adapt the use of ICT to the traditional teacher-centered mode of teaching (strongly connected to the established student examination system). Teachers’ attitude to adapt ICT mode of use is supported by research evidence that emphasize the situational character of knowledge and expertise. Introducing ICT into schools can be understood as initiating a “negotiation” process between cultures and the way that technological tools are used reflects school “single context” epistemological stance.”

Furthermore, according to Terry Anthony Haydn and Roy Barton (2008),stated that “some important determinants of progression in the ability to deploy ICT confidently and effectively in subject teaching were common to both subject groups, but that there were differing views

## Research Methodology

### Participants of the Study

The participants of the study were the English Language Teachers of elementary and secondary levels of Iligan City Division as well as the English teachers of MSU-IIT. Some of the respondents are not major in English but they are handling English subject. There were 44 respondents from Iligan City National High School, Maria Cristina National High School, Dalipuga National High School, Iligan City Central School, City East Central School and MSU-IIT.

### Research Design

The study used quantitative and qualitative survey method which aimed to determine and analyze the attitude and level of computer competence among English teachers of Iligan City Division as well as the English teachers of MSU-IIT. The study assessed the level of ICT Integration in English Language Teaching among English teachers in terms of the level of computer generalized self-efficacy, level of teaching and learning in terms of changes, incentives, barriers, and methods, adequacy infrastructure facilities in school to support ICT integrated activities, obstacles faced by the English teachers in carrying out ICT integrated teaching and learning activities and school administration support in the endeavour to utilize and integrate ICT tools in teaching and learning activities.

### Instruments Used

Both quantitative (selected-response survey items) and qualitative methodologies (open-ended survey response items adapted from Silor (2001) was utilized to determine the generalized self-efficacy(attitude),agreement as to how the integration and use of technology for teaching and learning changes the environment, extent as to how computer used as important incentives and motivators, problems encountered by the English teachers in the integration of ICT for teaching and learning in the

campus environment and the level of computer competence adapted from Armel Espiritu (Magazine Quality Teacher Volume 10 Issue 3.)

## Results and Discussions

Table 1: Length of service of respondents

	Frequency	Percent
1year - 3years	17	38.63
4years - 6years	9	20.45
7years - 9years	6	13.63
10 years above	12	27.27
Total	44	100.00

Table 1 presents the length of service of the respondents. As shown in the table there are 17 or 38.63% have 1 to 3 years' experience, 9 or 20.45% have 4 to 6 years' experience, 6 or 13.63% have 7 to 9 years' experience and 12 or 27.27% have 10 years and above experienced in teaching. The results show that majority of the respondents have 1 year to 3 years' experience in teaching.

Table 2: Generalized Self-Efficacy

Generalized Self - Efficacy	Mean	Description
I can always manage to solve difficult problems if I try hard enough	3.05	Often True
if someone opposes me, I can find means and ways to get what I want	2.42	Often True
it is easy for me to stick to my aims and accomplish my goals	2.79	Often True
I am confident that I could deal efficiently with unexpected events	2.78	Often True
thanks for my resourcefulness, I know how to handle unforeseen situations	2.75	Often True
I can solve most problems if I invest the necessary efforts	3.16	Often True
I can remain calm when facing difficulties because I can rely on my coping abilities	2.80	Often True
when I am confronted with problems I can usually find several solutions	3.02	Often True
if I am not in trouble I can usually find several solutions	3.05	Often True
no matter what comes my way, I'm usually able to handle it	2.91	Often True

Grand Mean: 2.873

### Scaling

3.25 – 4.0	Level 4 Almost Always True
2.5 – 3.24	Level 3 Often True
1.75 – 2.4	Level 2 Sometimes True
1.0 – 1.74	Level 1 Not at all true

Table 2 presents the attitude generalized self-efficacy of the English teachers in Iligan City. As can be gleaned in the table the highest statement which reflects the attitude of the English teachers in Iligan City is "I can solve most problems if I invest the necessary efforts" with the mean of 3.16, "I can always manage to solve difficult problems if I try hard enough" with the mean of 3.05 and "if I am not in trouble, I can usually find several solutions" with the mean of 3.05. The findings show that English teachers of Iligan City have optimistic self-beliefs to cope with a variety of difficult situations and have a broad and stable sense of personal competence to deal efficiently with a variety of stressful situations. In fact according to Ralf Schwarzer (2008), stated that the teacher self-efficacy is a personal resource factor that may protect from the experience of job strain and, thus, make the escalation of burnout less.

Table 3

	Mean	Description
faculty can spend more with individual students	2.56	Neutral
faculty can expect more from students in terms of their pursuing and editing their work	2.82	Disagree
faculty can be more comfortable with students working independently	2.02	Agree
faculty are better able to present more complex material to students	2.18	Agree
faculty are better be able to tailor students' work to their individual needs	2.34	Agree
faculty spends less time lecturing to the entire class	2.81	Neutral
faculty will spend more time working with smaller groups who are pursuing project - based work	2.62	Neutral
faculty will spend more time acting as a guide and facilitator with individual students	2.07	Agree
faculty spends less time with the whole class practicing or reviewing materials	2.56	Neutral
faculty will spend more time preparing materials and resources for instruction	2.62	Neutral

**Grand Mean: 2.5**

#### Scaling

4.2 – 5.0 Level 5 Strongly Disagree

3.4 – 4.1 Level 4 Disagree

2.6 – 3.3 Level 3 Neutral

1.78 – 2.5 Level 2 Agree

1.00 – 1.79 Level 1 Strongly Agree

Table 3 presents the level of agreement as to how the integration and use of technology for teaching and learning changes the classroom environment. As shown in the table, “faculty can be more comfortable with students working independently” has the mean of 2.02 which means “agree”, “faculty will spend more time acting as a guide and facilitator with individual students” has the mean of 2.07 which is “agree”, and “faculty are better able to present more complex material to students” has the mean of 2.18 with means “agree”. As depicted, the results show that through the integration of computer technology in teaching, there is really a change of classroom environment because teachers act as facilitator, helping the information flow. In fact according to Strickland (1989) in his research conducted at ERIC Education Resources Information, entitled “Computers and the Classroom: A Look at Changes in Pedagogy”, stated that “Computers in the classroom change the location of authority, directing focus away from the teacher and the chalkboard and onto the screen, onto the text generated on the computer. In this setting, the teacher acts as facilitator, helping the information flow. Finally, computers in the classroom change the way teachers teach, encouraging veteran teachers to reconsider old ways of teaching composition while they cope with the new technology”.

Table 4

	Mean	Description
computers are a tool that help students with learning tasks, such as writing, analyzing data, or solving problems	1.60	Strongly Agree
students are enthusiastic about the subjects for which they use computers	1.40	Strongly Agree
computers enable me to make subject more interesting	1.47	Strongly Agree
technology tools enable me to better diagnose learning problems	1.60	Strongly Agree

		Agree
I get personal gratification from learning new computer knowledge and skills	1.64	Strongly Agree
computers provide means of expanding and applying what has been taught	1.67	Strongly Agree
computer tools enable me to communicate and interact more within students	1.87	Agree
by integrating technology, I am helping students to acquire the basic computer education they will need for future careers	1.44	Strongly Agree
I enjoy figuring out how to use computers effectively for a variety of teaching situations	1.69	Strongly Agree
computers provide more opportunities for gifted students	1.87	Agree
technology tools enable students to help each other and cooperate on projects	1.53	Strongly Agree
computers provide an environment that appeals to a variety of learning styles	1.61	Strongly Agree

**Grand Mean: 1.616**

#### Scaling

3.25 – 4.0	Level 4 Strongly Disagree
2.5 – 3.24	Level 3 Disagree
1.75 – 2.4	Level 2 Agree
1.00 – 1.74	Level 1 Strongly Agree

Table 4 presents the statements that made computers as the important incentives and motivators in the teaching-learning process. As reflected in the table, “students are enthusiastic about the subjects for which they use computers” has the mean of 1.40 which means strongly agree, “by integrating technology, I am helping students to acquire the basic computer education they will need for future careers” has a mean of 1.44 which means strongly and “computers enable me to make subject more interesting” has a mean of 1.47 which means strongly agree. The results show that students are very enthusiastic in their study because of computers will really help them in doing their research. Teachers are also motivated to teach using computers because through the integration of this technology, students are also learning the basic computer education. Thus, it is very important to integrate computer in the curriculum. This is supported with the idea of Tom Curry (1995) in his research study entitled “Computer Integration as a Way to Develop Literacy in Schools” which emphasized that “Educational system must change its methods to better involve students in what they learn. One way to do this is to integrate computers into the curriculum and to use them in ways that permit students to acquire information through a more natural process. The student would be able to explore and learn through experience, process that assists in the retention of information and the development of literacy”.

Table 5: Barriers of the English Teachers in using computers for teaching and learning

Statistics	Mean	Description
faculty members lack enough time to develop instruction that uses computers	2.00	Agree
there are problems scheduling enough computer time and or resources for different faculty members' classes	1.80	Agree
hardware is unstable and always breaking computers for teaching and learning	2.36	Agree
the reward structure does not recognize faculty members for integrating computers for teaching and learning	2.51	Neutral
there are too few computers for number of students	1.76	Strongly

		Agree
there are too few computers for individual faculty	1.80	Agree
there is scarcity of printers and/or other peripherals in order to effectively use computers for teaching and learning	2.00	Agree
there is no enough time in the course schedule for computer related instruction	2.18	Agree
there is limited research literature that shows significant improvement in learning as a result of computer integration	2.11	Agree
financial support for computer integration from administration is inadequate	1.73	Strongly Agree
there is inadequate financial support for computer integration from administration	1.91	Agree
there is an inadequate financial support for computer for the development of instruction uses of computers	1.87	Strongly Agree
faculty members are not interested in using computers for instruction	3.16	Neutral
I am unsure how to effectively integrate computers into instruction	2.84	Neutral
available software is not adaptable to my instructional needs	2.69	Neutral
computers manuals and materials are inadequate and unhelpful	3.00	Neutral
there are too few training opportunities for faculty members to acquire new computer knowledge and skills	2.02	Agree
computers do not fit the course or curriculum that I teach	3.18	Neutral
there is less control over classroom instruction when using computers	2.98	Neutral
there is no recognition for using computers in teaching and learning	2.98	Neutral

Grand Mean: 2.365

#### Scaling

4.2 – 5.0 Level 5 Strongly Disagree

3.4 – 4.1 Level 4 Disagree

1.78 – 2.5 Level 2 Agree

1.00 – 1.79 Level 1 Strongly Agree

Table 5 presents the barriers of the English teachers in using computers for teaching and learning in the campus environment. As can be gleaned in the table the “financial support for computer integration from administration is inadequate” has the mean of 1.73 which means strongly agree, “there are too few computers for individual faculty” has a mean of 1.80 which is strongly agree and there is “an inadequate financial support for computer for the development of instruction uses of computers” has a mean of 1.87 which means strongly agree. The results show that there is really an insufficient budget in purchasing computers which will be used for the teachers in the teaching and learning process.

Table 6: Level of Computer Competence

Computer competence	Mean	Description
respondents basic computer operation	2.24	Awareness
file management	2.66	Mastery
word processing	2.34	Awareness
use of spreadsheet	1.70	Pre – Awareness
use of database	2.03	Awareness
use of graphics	1.81	Awareness
use of hypermedia	1.65	Pre – Awareness
use of network	2.34	Awareness
use of students assessment	1.92	Awareness

ethical use of understanding	2.19	Awareness
------------------------------	------	-----------

**Grand Mean: 2.08**

### Scaling

- 3.25 – 4.00 Level 4 Advanced
- 2.5 – 3.24 Level 3 Mastery
- 1.75 – 2.4 Level 2 Awareness
- 1.00 – 1.74 Level 1 Pre - Awareness

Table 6 presents the level of computer competence of the English teachers in DepEd of Iligan City and MSU-IIT. As depicted, the use of hypermedia has a weighted mean of 1.65 which means pre-awareness, the spreadsheet use has a weighted mean of 1.70 which means pre-awareness and . As reflected in the table, the results show that English teachers of the Iligan City lack their computer competence in using hypermedia and spreadsheet. This implies that English teachers in the DepEd and MSU-IIT are already knowledgeable enough with regards to the use of computers. However, there is only a need to enhance their knowledge and skills in the use of hypermedia and spreadsheet use.

### Conclusion

English teachers of the Iligan City lack their computer competence in using hypermedia and spreadsheet. This implies that English teachers in the DepEd and MSU-IIT are already knowledgeable enough with regards to the use of computers. However, there is only a need to enhance their knowledge and skills in the use of hypermedia and spreadsheet use. Thus, there is a need to enhance their computer skills through seminar-workshop on hypermedia and spreadsheet.

### References

1. Silor, A. (2001). Faculty Adoption Pattern of Computer Technology Used for Teaching and Learning in Higher Education. Cebu Normal University, Cebu City. Published Dissertation
2. Espiritu, A. (Volume 10 Issue 3). Quality Teacher Magazine
3. Strickland, J. (1989). Eric Educational Resources Information Center. <http://www.Eric.ed.gov>. Date retrieved: January 13, 2010.
4. Curry, T. (1995). Computer Integration as a Way to Develop Literacy in Schools. <http://www.eserver.org/courses>.
5. Ralf Schwarzer. Perceived Teacher Self-Efficacy as a Prediction of Job Stress and Burnout: A Mediation Analysis. <http://www.interscience.wiley.com/journal>. Date retrieved: January 13, 2010.
6. Haydn and Barton (2008). Some Important Determinants. <http://appli.oxfordjournals.org/cgi/content/> date retrieved: October 11, 2008.
7. Demetriadis et al. (2003). Learning How to Use Technology. Published in Computers and Education Volume 41 Issue
8. Warschauer, M. (2001). Language has always played an Important Role in the Formation and Expression of Identity. <http://www.englishteacher.com.au/stateICT>. Date retrieved: October 14, 2008
9. Sara, H. (2005). Evident Commitment to Incorporating ICT. [http://www.voced.edu.au/td/tnc\\_77.450](http://www.voced.edu.au/td/tnc_77.450) date retrieved: October 11, 2008.
10. San Mateo (1997). Philosophical Foundations and Legal Bases of Education. Manila: Katha Publishing House Inc.